

ABSTRACT

The present invention provides a communication device, comprising: transmission means for transmitting a plurality of data segments via a packet communication network, each of the data segments including a sequence number, the data segments being transmitted in sequence number order; receiving means for receiving an acknowledgement indicating a data segment which the destination device requests the communication device to transmit next; retransmission means for changing a transmission rate and for retransmitting one of the data segments in a case that the communication device has not received an acknowledgement including an acknowledgement number greater than a sequence number included in the retransmitted data segment when a predetermined time elapses following transmission of the original data segment; control means for determining a subsequent data segment to be transmitted next, and for controlling a transmission rate on the basis of a category of the acknowledgement and also information included in the acknowledgement.